



Patricia Piccinini
Curious affection
Peter McKay

I am interested in relationships:
the relationship between the
artificial and the natural, between
humans and the environment.
The relationships between beings,
within families and between
strangers. The relationship between
the audience and the artwork.
My work is never about one thing
alone; it is always about a family or
an ecosystem. Even when a creature
is alone, there is a relationship with
the viewer.

Patricia Piccinini

Patricia Piccinini's real medium is storytelling. Her stories describe a place 'where animal, plant, machine and human unite and commingle'. With these puzzling beings, the artist suggests we are entering a period in which:

We have to ask ourselves, if it is so hard to figure out where one thing starts and another ends, can we really continue to believe in the barriers that separate us?¹

In the exhibition 'Curious Affection', Piccinini's artworks combine to manifest a wondrous new world, a project greater than any other she has realised to date. Audiences are enveloped as they explore a layered, magical realm, and they are drawn out of their intellects as their emotions take over. Piccinini would say that feeling is an intrinsic aspect of all thought processes, and that we only think clearly when we address the contents and drivers of our emotions — though, of course, we have a propensity to deny or stifle all of this.

Influenced by science, Surrealism and the unconscious, the artist's forms — where body parts collide to make creatures — are sometimes startling, but rarely fearsome. They are fantastic, yet very familiar. We recognise certain parts of the anatomy, but also expressions and behaviours. Looking into a pair of thoughtful eyes or observing a caring gesture, it is easy to connect and empathise with the lives and experiences of Piccinini's creations. If we were better acquainted, we might even discover that we have much in common.

In this way, Piccinini deftly exercises and broadens our concern for others in ways we might not have enacted before, and this aligns her practice with the rising academic interest in posthumanism. Where thinkers once invested in the notion of humanism and its appeal to science and rationalism, many — including Rosi Braidotti, who contributes to this volume — now look at the failures of this project with alarm. As we arrive at the Anthropocene — the first geological era named in recognition of the impact of human activity — concern for environmental and social consequences affecting both human and non-human populations sounds everywhere. Critical perspectives from feminist, literary and postcolonial theorists reveal the disjunction between humanism's rhetoric of freedom, progress and positivist objectivity, and the suffering, inequality and disenfranchisement felt the world over. It is Piccinini's take on these persistent and troubling issues pertaining to race, class, gender, the mistreatment and suffering of animals, and the degradation of the environment that signals her brave compassion and acceptance of difference, and which embodies the underlying strength of her practice.

Heritage

Piccinini's creatures, or at least the ones crafted from multiple species, are known as chimeras, from the Ancient Greek term that originally referred to a fire-breathing beast comprised of both lion and goat, with a serpent for a tail. Now, however, 'chimera' accounts for all kinds of multi-species fusions.

Legendary creatures of similar forms existed across the ancient cultures of Europe, the Middle East, Asia and Africa. Ancient Egypt had a wealth of chimera deities,

but perhaps the iconic sphinx is the best travelled. With lion bodies and men's heads, they were considered powerful, yet kind. In Hindu cultures, the sphinx represents the idea that humans evolved from, and continue to incorporate, an animal consciousness. In Ancient Greece, a winged female sphinx fiercely guarded the city of Thebes, devouring anyone unable to answer her riddle.² Piccinini's *Sphinx* 2012 twists together all these histories into a creature that appears ready to give birth to intellect incarnate.

In a sense, though, Piccinini's chimeras have no past. Wearing our dress, sharing our space, and inhabiting very lifelike forms, they are conspicuously contemporary. Piccinini predicates their existence on advanced laboratory processes — genetic technologies such as gene splicing, in-vitro fertilisation (IVF) and, most recently, CRISPR.³ In her world, science becomes the vernacular for her myths, as she explains:

Myths often act to explain a complex and confusing world and clarify our place and responsibilities in it. These myths are usually populated by people and other beings — gods and creatures — that we cannot actually see in the real world, but which reflect some aspect of it. In some ways, I am attempting to create mythical beings that reflect complex ethical issues of our times.⁴

Historically, myths were not just used to explain our origins. They also had a significant role in shaping values and reinforcing social, political and intellectual structures. In our era, science now provides the explanatory narrative, clearing away superstitions and offering countless new insights and comforts. Yet our appetite for compelling narratives still churns.

In this respect, Piccinini's storytelling has something in common with that of the great feminist science fiction authors Octavia E Butler, Marge Piercy and Ursula K Le Guin.⁵ By drawing on their experiences as women — Piccinini often reflects on her experience as a mother of two — they encourage their audiences to imagine alternatives to patriarchy. At this point, it is important to note Piccinini's avowed distance from mainstream science fiction, which often merely relocates prevailing military narratives into technologically advanced futures, appreciating that these well-worn 'good vs evil' dichotomies occupy and polarise our cultural space, a place where more nuanced and progressive frames of reference could easily exist. Structuralist Claude Lévi-Strauss observed that, historically, myth enacts irreconcilable binaries in a 'process of opposition and correlation'. Here, 'experience shows that any difference to be observed may be correlated with other differences, so that a logical treatment of the whole will allow simplifications'.⁶ Audiences are acculturated to such simplified narratives — found in most sci-fi and storytelling — and know that the way to resolve tension is to side with the most sympathetic opposition. These dualisms seem all-pervasive in our culture: hero/villain; beautiful/ugly; familiar/foreign; advanced/primitive; male/female; white/black; self/other; culture/nature. Deeply embedded within our conscious and unconscious minds, Piccinini sees how these powerful patterns extract conformity, bending even the sharpest personal insights or social instincts out of shape.



For this reason, Piccinini's practice relates to the thinking of feminist scholar of science and technology Donna Haraway, and her expansive notion of 'SF'. In her influential essay 'A cyborg manifesto', originally published in 1984, Haraway recognised that cyborgs could, in fact, function outside these stubborn dualisms and, in this way, provide a template for the inclusion of difference.⁷ From this premise, Haraway would go on to develop her open and fluid concept of SF, describing the process of creating new worlds as science fiction does, but also incorporating socialist feminism, speculative fantasy, science fact, and, perhaps most significantly, string figures and speculative fabulation. String figures come from the ancient art and game of pulling patterns in string, which is sometimes associated with storytelling. To Haraway, string figures represent endless possibility, tying communal practices of doing, making and thinking together in the flow of time. Speculative fabulation gives special importance to the creation of fables as an exploratory social strategy to escape the snares of existing belief systems.⁸ Recognising the human need for narrative accounts of subjective experience alongside scientific insight, Haraway's SF — like Piccinini's practice — is about spinning new stories from multiple perspectives, human and non-human alike, in order to keep us from fraying in the face of abrasive traditions and reductive thinking.

Curiosity and transgression

Piccinini regularly plays on our conditioned responses; for instance, her engagement with the Gothic in *The gathering* 2007 primes our fears to reveal how easy it is to draw false conclusions. In a largely empty suburban house on a dark night, we see a young girl lying motionless on the floor. We initially fear this child has suffered a nasty fate. Soon enough, our fears materialise, as furry, wombat-like creatures rustle out from behind the curtains and furniture. Are they preparing an attack on the vulnerable girl, or are they back to finish the job? Instead, it seems they only want to show her to their young — safely concealed in pouches — as she slumbers. The scene concludes on a traditional Indian painting of a couple relaxing in a garden at night, implying all is well and that these creatures might actually be babysitters.

Piccinini's wombat-like creatures could be a counterpart to the creature in Dora Maar's celebrated surrealist photograph *Père Ubu* 1936 — alleged to depict an armadillo foetus, although this fact is famously unconfirmed by the artist and helps preserve its fertile mystery. Preoccupied with the realm of sleep, the surrealists

Dora Maar / France 1907–97 /
Père Ubu 1936 / Gelatin silver print /
 39.7 x 29.2cm / Gilman Collection,
 Purchase, Gift of Ford Motor
 Company and John C Waddell,
 by exchange, 2005 / Collection:
 Metropolitan Museum of Art,
 New York / Image courtesy:
 Art Resource, NY / © Dora Maar/
 ADAGP. Copyright Agency, 2018

The gathering (still) 2007



sought an alternative existence within the anarchy of the unconscious mind. As the human disaster of mechanised warfare tore through Europe during World War One, the surrealists contested the notion that man, newly empowered by industrialisation, was a rational animal. Rather, they saw a creature suppressed, repressed, and failing to account for the role of emotion in decision-making. Here, it is also useful to underscore the importance of visibility and representation as a feminist strategy. A number of important women surrealist artists are only now receiving just acknowledgment. Consequently, the movement was long characterised by its objectification of women – pictured as fetishes, apparently without their own insights and experiences.⁹ This scenario reminds us that when linking Piccinini's work to Surrealism, we might think primarily of the expressions and marginalisation of its women participants.

In *Doubting Thomas* 2008, Piccinini delves deeper into the hazards of expectation, turning the Christian story about the virtue of belief over scepticism on its head. In the original, Thomas the Apostle refuses to believe that Christ has risen from the cross until he sees his wounds with his own eyes. More than that, Christ invites him to place his finger in the gash in his side, the gruesome act being physical confirmation of his immortality, and one demonstrating faith's superiority to physical evidence. In Piccinini's version, however, Thomas is a young, inquiring boy, who reaches towards that same wombat-creature from *The gathering*, now perched on a chair. We are concerned by the boy's boldness, but Piccinini shows that neither party is hostile. Rather, she promotes mutual trust and respect, together with the importance of curiosity, all of which counter the fearful limits imposed by expectations of faith. On closer inspection, it seems the hidden litter is also curious about Thomas. This reciprocity is particularly resonant; after all, curiosity is only natural and need not be a quality associated only with humans. Like any good parent or carer, this creature supports its progeny, recognising that curiosity is the seed of knowledge.

Piccinini's art has often been compared with Mary Shelley's proto-science fiction classic *Frankenstein*, published 1818, particularly in their creators' attitudes

Michelangelo Merisi da Caravaggio /
Italy 1571–1610 / *The Incredulity
of Saint Thomas* c.1601–02 /
Oil on canvas / 107 x 146cm /
Prussian Palaces and Gardens
Foundation Berlin-Brandenburg /
Photograph: Hans Bach

OPPOSITE
Doubting Thomas (detail) 2008



to scientific curiosity. Shelley was a Romantic and, like the surrealists, sought to privilege nature above the burgeoning rational order of the Enlightenment and the Industrial Revolution. She describes protagonist Dr Victor Frankenstein's curiosity as unchecked and unhinged, warning that many transgressions against nature — and perhaps against God — lurk within the realm of progress. Yet Shelley also hints at her admiration for Frankenstein's ambition, particularly through the framing narrative of Captain Robert Walton. Piccinini, on the other hand, accepts the role of science and regards such tinkering, even with the very substance of life, as inevitable. Knowledge is simply useful, according to Piccinini. Today, while we might accept that there is no intrinsic moral hazard or blasphemy in such pursuits, undoubtedly this sensibility still lurks in our cultural inheritance — as Braidotti and Elizabeth Finkel expand upon later in this volume. This is why Piccinini's intention to reacquaint us with the wonders of nature renewed by technology — albeit a nature that has been redefined in the process — is such an important shift, as our pursuit of innovation has also driven us away from the natural world to this moment in time.

Care and cultures

Arguably, Piccinini and Shelley align more closely regarding questions of care and responsibility. In Shelley's example, Frankenstein neglects his duty to care for his progeny and this is the root of the monster's tragedy. Curiously, however, audiences tend to identify Frankenstein's monster, not the Doctor, as the villain. Without family or friend, the monster is hunted into the shadows and only commits murder in response to his cruel circumstances, though most of us still hold the poor creature responsible. The creature's difference makes his interminable disenfranchisement acceptable to us, but not his inevitable acts of violence. This contradiction signals our emotional distance stoked by a sense of disgust and, Piccinini might say, our lack of empathy, an ever-present concern in the artist's oeuvre.

Before her chimeras, Piccinini embarked on the series 'The Mutant Genome Project (TMGP)' 1994–95, which almost grossly counters Frankenstein's neglect.¹⁰ TMGP was a fictitious corporation offering genetic engineering to the designer baby market. While scientists and ethicists wrestled with the societal implications of even minor instances of embryo screening, Piccinini pondered something altogether stranger and 'amoral' in her imagined promotional material. TMGP's flagship product was LUMP™, an acronym for 'Life Form with Unevolved Mutant Properties'. Pushing the then stark limitations of 3-D digital modelling, each LUMP™ was impossibly smooth with prominent eyes, large bobble head (signifying their potential intelligence), and no legs (so they would always be at hand). TMGP — pursuing their slogan's logic 'your sperm, your egg, our expertise' — made designer pets of designer children.¹¹ Fashioned completely from human DNA, they might grow old, but they would never grow up. Hence, they were genetically destined to be pedomorphic. TMGP's customers, therefore, could enjoy their parental role as the carers of infants in perpetuity. But would these would-be parents, let alone their genetically modified children, really be satisfied by this interminable pandering? This is diametrically opposed to Shelley's vision, but is it also care gone mad?

Like many works from the TMGP series, *Psychotourism* 1996 features Sophie Lee, the then 'It Girl' of Australian television. As a real-world fantasy inhabiting overtly digital fictions, her presence served to foreground the conspicuous corporate intent to manipulate our desires. Consequently, perhaps the strangest thing about this campaign is the way both parenthood and childhood, and the relationship between the two, were redesigned almost incidentally within this space of product development and marketing.¹² The recent sculpture *The Bond* 2016 revisits this motif. Similar to Lee's stance, a mother (modelled after the artist) stands with a youngster nestled under her chin. Presumably her child, he is also clearly more than human: part pig and part sports shoe. This unexpected inclusion of product design imagines a future in which consumer desire has seamlessly entered our closest relationships.

This aligns with the concept of 'natureculture', as put forward by Haraway in *The Companion Species Manifesto* (2003). We might reflect that human actions have had a firm hand in the evolution of species, be it through domestication, breeding and agriculture; however, the implications go much further, with the transformations resulting from land clearing, industry, housing and our incredible propensity for waste. If we acknowledge the intricate interconnectedness supporting and shaping life on our planet, we might start to consider all human activity — and all our culture — as part of a natural complexity instead of a separate, often oppositional, entity. Looking further at our relationships with companion animals, such as dogs, but also with all manner of 'organic beings, such as rice, bees, tulips, and intestinal flora, all of whom make life for humans what it is — and vice versa', Haraway saw a vital and intricate continuum. Life, especially human life, is not possible outside such connections, and in this way, 'natureculture' and companionship became another compelling model for eroding dualism and division.¹³

Rights and needs

While we love our companion animals, and could conceivably hold other fantastic creatures dear in this way, our relationship with many other kinds of animals is much less easily characterised. Accordingly, much of Piccinini's work addresses questions of rights and equity.

When presented at the Australian Pavilion for the 50th Venice Biennale in 2003, *The Young Family* 2002 consolidated Piccinini's international reputation. To this day, it remains a prescient work. Coiled and reclining, a tired mother displaying human and pig traits nurses a litter of four. On closer inspection, she is surprisingly old, with a face chronicling years of wrinkled concern. Penned in by white leather furniture, this family has been bred for organ 'donation'. This is because pigs are seen as a safe and comparatively ethical source of organ transplants compared to other species, such as primates; pigs are intensively farmed for food, and their organs approximate human proportions. As might be expected, however, our bodies reject pig tissue, so Piccinini renders us this hybrid; in fact, clinical research into engineered (human-compatible) pigs has taken place for over 15 years.¹⁴





Ute Klopheus / Germany 1940–2010 /
Joseph Beuys / Germany 1921–86 /
Joseph Beuys in the Action
'Explaining pictures to a dead hare'
1965, printed 1997 / Gelatin silver
photograph / 30.7 x 20.5cm (irreg.) /
Collection: Art Gallery of New South
Wales, Sydney / © bpk/Stiftung
Museum Schloss Moyland/Ute
Klopheus; Joseph Beuys/VG
Bild-Kunst. Copyright Agency, 2018

OPPOSITE
Balasana (detail) 2009

In 1975, moral philosopher Peter Singer popularised the term 'speciesism' with his book *Animal Liberation*.¹⁵ Premised on the idea that discrimination against other species is akin to the gender supremacism of sexism, or the racial/nationalist supremacism of racism, Singer argued that speciesists ignore animal suffering, primarily inflicted by agriculture, for reasons of power and convenience. He proposed that there is no moral consistency in avoiding suffering in human lives, but not in non-human beings. Yet even Singer has been careful to note that just because we might be logically compelled to recognise and ameliorate the suffering of non-human lives, this does not mean that all beings suffer from all actions equally, or that the value of a human life is the same as that of any other living being. Some farms and research experiments are likely necessary, though many fewer than we see today. Instances of suffering must be at a minimum and strictly contained, and the benefits must be demonstrable beyond simple profit or gratification.

Piccinini candidly admits that if her children needed a transplant she would take a young chimera's life without hesitation — and, as a utilitarian, Singer would conceivably concur. And it is here that we start to see limits. To return to our discussion of myth and inherited frameworks, in the Christian tradition, 'man' was made in God's image and animals were created for our use. This dualism has long justified our very mixed relationships with animals. It seems paradoxical that the mistreatment of these chimeras could compel us to halt animal suffering — yet this possibility speaks to the great moral complexity of the time we live in.

Works such as *Balasana* 2009 contribute another view without the weight of life-and-death scenarios intruding, and without a narrative related to genetic engineering. Titled after the Sanskrit word for the yoga position known as 'child's pose', *Balasana* shows a young girl and wallaby stretching together in absolute, and perhaps impossible, harmony. The improbability of the scene suggests we are privy to a dream. In this way, *Balasana* presents us with an enchanting symbol of a more balanced relationship with nature, at the same time acknowledging the apparent obstacles to achieving such equilibrium.

These ponderings concerning rights might also extend to potential medical applications for human cloning and stem cell technology. In *The Comforter* 2010, for instance, a girl sits cradling a newborn. Looking closer, we see both are mutants. Covered with hair, the girl exhibits the naturally occurring condition hypertrichosis, known colloquially as werewolf syndrome. The infant in her arms is amorphous with extremely short legs, multiple arms without hands, and a face only recognisable by a protruding mouth. This mutant creature could be naturally occurring too, but it could also be the result of errant, or even intentional, genetic engineering, perhaps to provide cells to aid the girl's hypertrichosis. This pairing reminds us that mutation is often natural, and when we harness its powers, we are simply helping to direct something in nature. Regardless, it would seem that the newborn would not likely survive long, and perhaps this is why the girl comforts it.

Interestingly, the composition and implied sacrifice of *The Comforter* invokes ideas at work in Joseph Beuys's shamanistic performance *Explaining pictures*

to a dead hare 1965, in which he set about his educative task with a face covered not with hair, but gold leaf adhered with honey. Associated with renewal, Easter and the Christian Resurrection, hares and rabbits are symbols of passing back and forth between life and death. Cradling the hare, Beuys searches for a miracle of resurrection and interspecies communication to explain the long history of the human exploitation of animals. Piccinini's focus on future medical miracles is similarly cryptic. In both works, a picture of reciprocal comfort and empathy set against a backdrop of asymmetric power lingers unresolved. Could it be possible that some lives may be designed so that they won't ever know their sacrifice, so that they bear the ultimate cost outside this history of suffering?

Moving from medical quandaries to familial care, *Big Mother* 2005 is an evocative figure. Inspired by Piccinini's difficulty breastfeeding her first child, and a story about a grieving baboon that took a human baby after her own had died, *Big Mother* has been specifically engineered for her child-rearing potential. A long muzzle with lightly coloured flares discloses her mandrill-human genetics. These traits might well be incidental, attached to the coding of another desirable child-rearing characteristic such as long arms, useful when juggling one child or many. Regardless, her flattened smile, furrowed brow and distant gaze all reveal an unhappy condition.

Has *Big Mother* — perhaps the ultimate mother — been created simply to serve human families? Would this render her a slave, either by design or by force? Is she able to have a family of her own? Perhaps the technology used to create her has rendered her twice sterile — engineered *ex nihilo* without parents, and perhaps unable to bear children. Is there a broader path to fulfilment open to her? It appears that she should have a high degree of agency in her existence generally, but this doesn't seem evident in her circumstances. As with many of Piccinini's creations, however, a broader narrative is at work: in this case, a concealed and updated Madonna and Child theme. Both the Madonna and this chimera are virgin mothers, tasked to raise a child without their consent. During the Italian Renaissance, the Madonna was painted wearing bright ultramarine robes. Derived from the expensive mineral pigment lapis lazuli, this blue became symbolically associated with purity, virginity and the Immaculate Conception. Left naked, however, *Big Mother*'s dignity is not adorned or bestowed, rather, it originates from within. It seems significant that the blue here attaches not to the mother, but to her baby bag. Apart from the question of species disparity, this is a work that begs the question of how we regard mothers. Do we fail to value their contributions?

With *The Carrier* 2012, Piccinini has bookended *Big Mother*, ruminating on new questions as to how to care for ageing populations who may be isolated as a consequence of changing family structures. Piccinini's carrier is a muscular male with bright eyes and bear traits in his nose, back and claws. He is also balding, with age spots, and carries a little excess weight; however, he lifts the elderly woman behind him with ease. Perched up high, she looks comfortable and content to rely on his assistance.¹⁶ In this way, we might see *The Carrier* as the next step in inclusive posthuman technology.

As with *Big Mother*, however, his life seems engineered to the task he performs, and we would be right to be concerned for his agency too. Notably, in *The Carrier*, both figures look and travel in the same direction and appear to share a vision. Aged care is big business, and it is feasible that the male is well compensated for his work, even happily self-employed. It is hard to determine if he is subject to a new kind of class inequity, but the intent is most likely that we might better perceive the presence of inequity as we look back out to the world, having ruminated on this dynamic.

A new nature

Shifting the application of task-engineered beings from accommodating human needs to countering human negligence, Piccinini's 'Nature's Little Helpers' series 2004–05 addresses broader ecological concerns at the nature end of 'natureculture'. Around our largest capital cities, in particular, Australia's sprawling suburbs have long encroached on the habitats of many native species, pushing them to the brink of extinction. Comprehending the difficulty of countering this force, Piccinini designed new 'defender' species that could compensate for humans' destructive tendencies. In *Bodyguard (for the Golden Helmeted Honeyeater)* 2004, her solution-animal supports the survival of Victoria's only endemic bird, the critically endangered Golden Helmeted Honeyeater. A mix of armadillo, monkey, bat and goat, *Bodyguard* is armoured and agile, with large ears for enhanced hearing, and pronounced teeth and tusks for defence and for harvesting the Honeyeater's favourite tree sap.

At some level, it seems nature is already compensating in similar ways for our behaviour. In 2016, researchers at the Kyoto Institute of Technology discovered a strain of bacteria with an enzyme that enabled them to feed on PET plastics, decomposing in six weeks what would usually take 450 years. As PET has only been in existence since 1941, scientists believe this strain of bacteria is newly evolved.¹⁷ We might also recall the foolhardiness of Queensland's cane toad experiment,¹⁸ but even this disaster offers another hope, according to Australian biologist Tim Low. In *The New Nature*, Low demonstrates with countless examples how plants and animals continue to adapt to new challenges. For example, in order to avoid the poisonous shoulder glands of cane toads, he observed that:

... birds flip over toxic cane toads and tear out their stomachs or strip flesh from their thighs. Toads sound like meals of desperation when they're really just a cheap and easy resource ... I have seen forty dead toads around a small dam with only their tongues removed.¹⁹

Here, Low shows that popular views of nature as pristine and fragile are misguided, and even when nature stays the same at a genetic level, it can still radically adapt to rapidly changing circumstances.

We often invoke the spirits of wild animals in the design and promotion of luxury consumer items, especially cars — Jaguar being one of the most obvious — but what if new machines grew animal instincts? With self-driving cars now a reality, we might also consider the rise of Artificial Intelligence (AI) and the idea of self-replicating machines. In Piccinini's *Embryo* 2016 and *Crimson Wolf* 2007,



we face the serious notion that AI might eventually wrench independence from us in ways biological creatures have not yet managed to do. What is remarkable about Piccinini's embryo concept, however, is that it implies a life cycle with the magical potential for growth and development, but also differentiation and the powerful evolutionary advantages of sexual reproduction — an imagining much more fruitful than anthropomorphic sex robots.

The stags 2008, a magnificent display of two Vespa-styled male 'deer' in a contest for dominance, perhaps project the maturation of *Embryo*. Inspired by Mods — the youthful English scooter-centric subculture of the late 1950s and 1960s — *The stags*' rebellious behaviour apparently operates well outside our influence. Escalating the drama, recent work *The Struggle* 2017 is modelled after the work of eighteenth-century Romantic painter George Stubbs. Stubbs is famous for his cycle of 'Horse and Lion' subjects, including *A lion attacking a horse* c.1765. Here, Piccinini replaces the horse with one of her Vespa 'deer', but, of course, we still expect the lion's aggression to win out in the end.

Recently, Google's DeepMind project documented the emergence of aggressive and cooperative behaviour in AI, contingent on what strategy elicited the most success in a range of games simulating real-world social dilemmas.²⁰ In some respects, Google's research iterates what we already observed in Shelley's scenario: that specific conditions give rise to specific behaviours, and if we want to cultivate certain expressions, we need to consciously consider what we subject one another to. Apocalyptic visions of AI rising against us abound in popular culture, however, it would seem that our culture's interest in violence and division might be what really underpins these narratives — and to avoid such conflicts we might simply seek out other paradigms to live by.

But it is not just AI that is advancing. CRISPR now stands to revolutionise genetic engineering. Taken together with Haraway's 'SF' and 'natureculture' concepts, the potential of CRISPR now drives Piccinini's wildest explorations. CRISPR is an extremely accurate, affordable and accessible gene-editing system. Using the strategies of a virus to enter new genetic material into a mature organism, CRISPR has been compared to the electronic word processor in its capacity to 'cut and paste' elements together. Meanwhile, exhaustive databases are being

George Stubbs / England 1724–1806 /
A lion attacking a horse c.1765 /
Oil on canvas / 69 x 100.1cm /
Felton Bequest, 1949 (2052-4) /
Collection: National Gallery
of Victoria, Melbourne

Venus of Willendorf c.29th century
BCE / Limestone / 11cm (height) /
Collection: Naturhistorisches
Museum, Wien (Natural History
Museum, Vienna)

assembled that will help users to accurately predict gene expressions. Kits are already available to purchase online, and high school students in the United States can even attend CRISPR summer camps.²¹ Though this kind of therapy is still experimental, in China, some 86 cancer and HIV patients have already attempted treatments using the technology.²² And, while the full implications of CRISPR are still unknown, Piccinini grasps its potential in the suite of new works that she has realised for 'Curious Affection'.

First, a giant inflated form, over three storeys high, blooms from the roof of a garden shed: the creation of a backyard biologist, perhaps. The hue of illuminated flesh, *Pneutopia* 2018 is set against teal-coloured walls and creates a strange, ambient light. It might be the long-lost relative of a puffball fungus or pufferfish, but in the realm of fantasy literature, it recalls the Inflatable Loons of Loonville that inhabit L Frank Baum's twelfth Land of Oz book *The Tin Woodman of Oz* (1918). In Baum's original, the Tin Woodman and the Scarecrow sit in a forest recounting the story of how the Woodman lost his limbs and became made of tin. Originally a woodsman named Nick Chopper, the Wicked Witch of the East cast a spell on his axe to chop him to pieces and discourage his love for her servant munchkin, Nimmie Amee. Piece by piece, he transformed into tin, eventually losing his heart, along with his capacity to love. Setting out on our journey, perhaps we are a little like the Tin Woodman, who encounters and escapes the Inflatable Loons as he tries to find Amee. In any event, Piccinini's staging is a wonderfully elliptical acknowledgment of Baum's legacy, and makes for an enchanting starting point for our own heartfelt journey.

From the world of *Pneutopia*, we walk into an immersive environment filled with life and pulsing with sound. Some 3000 transgenic, fleshy flowers populate *The Field* 2018, which is as abundant as it is wild. Associated with spring, renewal and female fertility, Piccinini fuses a flower form with the Venus of Willendorf. Here, Piccinini cites the work of archaeologist Marija Gimbutas and her representations of women-centred ('matristic') prehistorical societies. In *The Civilization of the Goddess*, Gimbutas proposed the existence of peaceful and goddess-centric agrarian societies in Neolithic and Bronze Age Europe.²³ Piccinini's ingenuous invocation immediately conjures a sense of how very different our world could be, culturally and biologically. In this space, *The Pollinator* 2017 joins a small primate to a pair of balletic legs in a dance of insemination. Fertilising this miracle landscape together, their graceful, multi-species collaboration further animates the narrative. Adjacent is *Kindred* 2018, a sculpture of an orangutan mother and two babies, one human and one chimera. Piccinini explains:

The idea that we, as humans, are uniquely and fundamentally different from other animals is a cornerstone of how humans have traditionally seen themselves. It is this 'specialness' that allows us to exploit the environment and other beings around us so completely. However, both genetic analysis and observation is now showing how small the difference is. We see common DNA everywhere, and common behaviours in many other animals, especially primates. Like us, orangutan mothers keep their children close and educate them for many years. In this work, we see three unique individuals each set at a different point on a continuum of greater or less 'animal-ness'. However, the point is not their differences, but their connection.²⁴

Recalling *Big Mother* and *The Carrier, Kindred* pictures a positive view of our future engagement with other species in a pure expression of the commitment of motherhood.

An elevated path then carries us to *Heartwood* 2018. It is another free combination of animal and plant species in a magnificent gnarled tree stump/torso, atop which sits an eagle. *Heartwood's* twisted reach might fuse the ecstasy of Christian martyr St Sebastian with Patrick White's poetic *The Tree of Man* (1955), a novel that reflects on the harsh and lonely settler experience in Australia. Then we descend to *The Grotto*, a safe space housing an astonishing number of sleeping bats resembling suspended fungi. Both life forms thrive in dark and damp caves, and Piccinini's fusion of glossy ceramic shapes recalls the wet walls of underground colonies. En masse, they also suggest a fruiting, fecund body. Across many species, males rear the young — from seahorses to marmosets, frogs and birds — and in *The Grotto* sit the wise-looking *Eagle Egg Men*, who watch over the progeny at their feet like emperor penguins. There seems to be a symbiotic exchange between the lives in *The Grotto*: many fungi have medicinal qualities (specifically the fungus genus *Penicillium notatum*, from which penicillin is extracted), and perhaps the bats offer sustenance and healing, while the *Eagle Egg Men* provide protection.

This magical world concludes with a caravan next to *The peace between lightning and thunder* 2018, a diorama which is teeming with wildlife and inspired by Queensland's Glass House Mountains. Inside the caravan, we glimpse the tender embrace of two human-bear chimeras — a pure and heartfelt expression of affection. Such behaviour is common to many species, however, it is one of many characteristics we regularly mistake as being quintessentially human. Resting as nomads at the edge of this world, we might take joy in their journey as we have in our own, appreciating their new culture and their possible escape from complicated lives. We might recall dadaist Marcel Duchamp and his late work *Étant donnés* 1946–66. Through peepholes in an old wooden door, Duchamp presented a naked woman sprawled on the ground in nature. Once positioned as a late masterwork, today *Étant donnés* is more likely to seem perverse in its indeterminate air of violence and obvious objectification. In contrast, Piccinini's human-bear couple, at home in their caravan, displaces any threat of misogyny or brutality.

With 'Curious Affection', Patricia Piccinini makes no attempt at prognostication: we should not expect to see her creations — living and breathing — beyond gallery walls anytime soon. Instead, she promotes an ideal of resuscitation and renewal through a greater engagement with nurture, empathy and diversity — spinning valuable new stories to help us make meaning from our existence today, and opening up new possibilities of growth for our future lives. Full of hope for what might exist beyond human exceptionalism, her gestures — though novel and often challenging — are ultimately optimistic. For all its imagination, it would seem an overreach to call Piccinini's vision a fantasy at a moment when our world is on the brink, burdened by the environmental and social pressures that weigh so heavily on human and non-human lives alike. From her viewpoint, it might seem that the present condition is the real fantasy.

- ¹ Patricia Piccinini, interview with the author, Melbourne, 6 December 2017.
- ² The riddle: 'What walks on four feet in the morning, two in the afternoon and three at night?'; the answer: 'man'. See Apollodorus, *Bibliotheca*, Book 3, Chapter 5, Section 8.
- ³ CRISPR stands for Clustered Regularly Interspaced Short Palindromic Repeats; see Viviane Richter, 'What is CRISPR and what does it mean for genetics?', *Cosmos Magazine*, 18 April 2016, <<https://cosmosmagazine.com/biology/what-crispr-and-what-does-it-mean-genetics>>, viewed December 2017.
- ⁴ Patricia Piccinini, 'Big Mother 2005' [artist statement], *Patricia Piccinini*, <<https://www.patriciapiccinini.net/writing/50/441/55#>>, viewed December 2017.
- ⁵ See, in particular, Octavia E Butler's 'Xenogenesis' trilogy, comprised of *Dawn* (1987), *Adulthood Rites* (1988) and *Imago* (1989); Marge Piercy's *Woman on the Edge of Time* (1976); and Ursula K Le Guin's 'Hainish Cycle', a series of novels spanning 1966–2002.
- ⁶ Claude Lévi-Strauss, 'The structural study of a myth', *Journal of American Folklore*, vol.68, no.270, 1955, pp.428–44, 442, 436.
- ⁷ Donna Haraway, 'A cyborg manifesto: Science, technology, and socialist-feminism in the late twentieth century', in *Simians, Cyborgs and Women: The Reinvention of Nature*, Routledge, New York, 1991, pp.149–81.
- ⁸ Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene*, Duke University Press, Durham, NC, 2016.
- ⁹ Patricia Allmer, 'Of fallen angels and angels of anarchy', in Patricia Allmer (ed.), *Angels of Anarchy: Women Artists and Surrealism* [exhibition catalogue], Manchester Art Gallery; Prestel, Munich, 2009, p.13.
- ¹⁰ 'The Mutant Genome Project (TMGP)' was a response to the international Human Genome Project to map the human genome that was launched in 1990 and completed in 2003.
- ¹¹ Patricia Piccinini, *THE MUTANT GENOME PROJECT* 1996 [artist statement], *Patricia Piccinini*, <<http://www.patriciapiccinini.net/archive/>>, viewed January 2018.
- ¹² Patricia Piccinini, *YOUR TIME STARTS NOW* 1996 [artist statement], *Patricia Piccinini*, <<http://www.patriciapiccinini.net/archive/>>, viewed January 2018. Lee was then known as host of Channel 9's *Bugs Bunny Show* and the controversial *Sex* series, also known as *Sex with Sophie Lee*. In hiring Lee, Piccinini showed insight and a wry sense of humour regarding the celebrity's qualifications.
- ¹³ Donna Haraway, *The Companion Species Manifesto: Dogs, People, and Significant Otherness*, Prickly Paradigm Press, Chicago, 2003, pp.15, 26–32.
- ¹⁴ Peter Cowan, 'Xenotransplantation: Using pigs as organ and tissue donors for humans', *The Conversation*, 14 December 2011, <<http://theconversation.com/xenotransplantation-using-pigs-as-organ-and-tissue-donors-for-humans-4291>>, viewed January 2018.
- ¹⁵ The 40th anniversary edition of Peter Singer's *Animal Liberation* was published in 2015; Vintage Digital, London, 2015.
- ¹⁶ The scenario recalls the field research of industrial designer Patricia Moore in the 1970s. From her first day on the job in the overwhelmingly male-dominated industry, Moore questioned why the design of products ignored the needs of the elderly and people with disabilities when good design could actually improve the capacities of both groups. To better understand these needs, Moore started wearing prosthetics in public that limited her mobility, vision and hearing, as well as a costume that aged her appearance (she was only 26 at the time).
- ¹⁷ Rachel Sullivan, 'Newly discovered plastic-eating bacterium can break down PET', *ABC News*, 11 March 2016, <<http://www.abc.net.au/news/science/2016-03-11/plastic-eating-bacterium-can-break-down-pet/7238614>>, viewed December 2017.
- ¹⁸ The cane toad experiment involved the introduction of the species to control pest beetles in Queensland's sugar cane crops in the 1930s; it is now one of the country's best-known introduced pests, with no known predators. See 'Defining moments in Australian history: Cane toads', *National Museum Australia*, <http://www.nma.gov.au/online_features/defining_moments/featured/cane_toads>, viewed January 2018.
- ¹⁹ Tim Low, *The New Nature: Winners and Losers in Wild Australia* [Rev. edn], Penguin Books Australia, 2017, p.99.
- ²⁰ Joel Z Leibo, Vinicius Zambaldi, Marc Lanctot, Janusz Marecki and Thore Graepel, 'Multi-agent reinforcement learning in sequential social dilemmas', *Cornell University Library*, 10 February 2017, <<https://arxiv.org/pdf/1702.03037.pdf>>, viewed December 2017.
- ²¹ Mallory Locklear, 'These kids are learning CRISPR at summer camp', *Vice*, 28 July 2017, <https://motherboard.vice.com/en_us/article/kzavja/these-kids-are-learning-crispr-at-summer-camp>, viewed December 2017.
- ²² Preetika Rana, Amy Dockser Marcus and Wenxin Fan, 'China, unhampered by rules, races ahead in gene-editing trials', *Wall Street Journal*, 21 January 2018, <<https://www.wsj.com/articles/china-unhampered-by-rules-races-ahead-in-gene-editing-trials-1516562360>>, viewed January 2018.
- ²³ Marija Gimbutas, *The Civilization of the Goddess*, HarperCollins, San Francisco, 1991.
- ²⁴ Piccinini, interview with the author.